

Title (en)

A PLASMA TORCH CONSUMABLE COMPONENT

Title (de)

KONSUMIERBARE KOMPONENTE FÜR EINEN PLASMA-SCHWEISSBRENNER

Title (fr)

COMPOSANT CONSOMMABLE DE TORCHE PLASMA

Publication

EP 3928908 A1 20211229 (EN)

Application

EP 21189851 A 20190402

Priority

- US 201815947258 A 20180406
- EP 19166758 A 20190402

Abstract (en)

A plasma torch consumable component (200) is provided that is removably coupleable to a plasma torch (22) configured to automatically identify one or more plasma consumable components installed within a plasma torch body (100) of the plasma torch (22). The plasma torch consumable component (200) comprises a surface that is optically viewable at an operative end of the plasma torch (22) when the plasma torch consumable component is installed in the plasma torch (22). One or more passive, mechanical markings (210) are disposed on the surface, the one or more passive, mechanical markings providing information relating to at least one of: an identity of the plasma torch consumable component (200); an operational parameter associated with the plasma torch consumable component (200); and a presence of the plasma torch consumable component (200) in a requisite location within the plasma torch (22). A cartridge containing the consumable component, and a method of providing such a consumable component, are also provided.

IPC 8 full level

B23K 9/095 (2006.01); **B23K 9/10** (2006.01); **B23K 9/26** (2006.01); **B23K 10/00** (2006.01); **H01H 1/34** (2006.01)

CPC (source: BR CN EP KR US)

B23K 3/0478 (2013.01 - KR); **B23K 9/095** (2013.01 - US); **B23K 9/0953** (2013.01 - BR EP US); **B23K 9/0956** (2013.01 - BR EP KR US); **B23K 9/1006** (2013.01 - EP US); **B23K 9/1012** (2013.01 - US); **B23K 9/26** (2013.01 - EP US); **B23K 9/28** (2013.01 - CN); **B23K 9/32** (2013.01 - CN); **B23K 10/00** (2013.01 - CN EP US); **B23K 26/032** (2013.01 - BR US); **B23K 37/00** (2013.01 - CN); **B23K 37/02** (2013.01 - CN); **B23K 9/013** (2013.01 - US); **B23K 9/1006** (2013.01 - BR); **B23K 9/26** (2013.01 - BR); **B23K 10/006** (2013.01 - US)

Citation (search report)

- [XAI] EP 2835041 A2 20150211 - HYPER THERM INC [US]
- [X] US 9713852 B2 20170725 - BECKER WILLIAM J [US], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3549706 A1 20191009; **EP 3549706 B1 20231101**; **EP 3549706 C0 20231101**; AU 2019202346 A1 20191024; AU 2019202346 B2 20210121; AU 2019202346 C1 20210722; BR 102019006697 A2 20191105; CA 3038788 A1 20191006; CA 3038788 C 20210302; CN 110340503 A 20191018; CN 110340503 B 20221025; CN 115446431 A 20221209; EP 3928908 A1 20211229; JP 2019214072 A 20191219; JP 2021178365 A 20211118; KR 102193362 B1 20201221; KR 20190117390 A 20191016; MX 2019003968 A 20191007; US 10625359 B2 20200421; US 2019308268 A1 20191010

DOCDB simple family (application)

EP 19166758 A 20190402; AU 2019202346 A 20190404; BR 102019006697 A 20190402; CA 3038788 A 20190402; CN 201910268233 A 20190404; CN 202211195827 A 20190404; EP 21189851 A 20190402; JP 2019072921 A 20190405; JP 2021118106 A 20210716; KR 20190040238 A 20190405; MX 2019003968 A 20190404; US 201815947258 A 20180406